



*PIPER MEMORIAL AIRPORT
353 PROCTOR STREET
LOCK HAVEN PA 17745*

Unmanned Aerial System Remote Pilot In Command Course Review

Review Introduction

The Federal Aviation Administration (FAA) has adopted specific rules to allow the operation of civil small unmanned aircraft systems (sUAS) in the National Airspace System (NAS) for purposes other than hobby and recreation. The rules are specified in Title 14 of the Code of Federal Regulations (14 CFR) part 107, Small Unmanned Aircraft Systems. 14 CFR part 107 addresses sUAS classification, certification, and operating rules.

Remote Pilot in Command Eligibility Requirements

To apply for a part 107 remote pilot certificate with an sUAS rating, you must be at least 16 years old; able to read, speak, write, and understand the English language (FAA may make exceptions for medical reasons); and in a physical and mental condition that would not interfere with the safe operation of sUAS.

Training and Testing Requirements

A part 61 pilot certificate holder with a current flight review (per 14 CFR part 61.56) may complete this initial online course or the initial FAA Unmanned Aircraft General (UAG) Knowledge Test at a Knowledge Testing Center (KTC). Every 24 months, such individuals may then take the recurrent online course or the recurrent FAA UAG Knowledge Test at a KTC. Any other applicant is required to take the initial FAA UAG Knowledge Test at a KTC, followed by the recurrent FAA UAG Knowledge Test at a KTC (every 24 months).

Application Process for a Remote Pilot Certificate

After satisfying the applicable initial training or testing requirements, apply for a part 107 remote pilot certificate with an sUAS rating through an online or paper process. Apply online through the Integrated Airman Certificate and/or Rating Application (IACRA) website or submit a paper FAA Form 8710-13, Remote Pilot Certificate and/or Rating Application. You may be required to meet with an FAA authorized individual, such as a Certified Flight Instructor (CFI), Airman Certification Representative (ACR) for a pilot school, a person designated by a Flight Standards District Office (FSDO), or Designated Pilot Examiner (DPE).

Small Unmanned Aircraft System (sUAS) Characteristics

Small unmanned aircraft:

- Weigh less than 55 pounds (25 kg), including everything that is onboard or otherwise attached to the aircraft.
- Are operated without the possibility of direct human intervention from within or on the aircraft.

A small unmanned aircraft system includes the unmanned aircraft itself and its associated elements that are required for safe operation, such as communication links and components that control the aircraft.

Exclusions

14 CFR part 107 does not apply to model aircraft that meet the criteria in 14 CFR part 101.41, amateur rockets, moored balloons or unmanned free balloons, kites, operations conducted outside the United States, public aircraft operations, and air carrier operations.

Registration Requirements

Owners must register sUAS with the FAA prior to operating in the NAS if the aircraft is greater than 0.55 lbs and operated under the provisions of 14 CFR part 107. If the owner is less than 13 years of age, then the small unmanned aircraft must be registered by a person who is at least 13 years of age.

Obtain a Foreign Aircraft Permit before conducting any operation that involves a civil aircraft that is registered in a foreign country or owned, controlled, or operated by someone who is not a U.S. citizen or permanent resident.

Marking Requirements

Before operation, mark the sUAS to identify that it is registered with the FAA. The registration marking must be a unique identifier number, legible and durable, and visible or accessible without tools.

Crew Resource Management

An sUAS operation may involve one individual or a team of crewmembers:

- The Remote Pilot in Command (Remote PIC) holds a current remote pilot certificate with an sUAS rating and has the final authority and responsibility for the operation and safety of the sUAS
- A person manipulating the controls operates the sUAS under direct supervision of the Remote PIC
- A visual observer acts as a flight crewmember to help see and avoid air traffic or other objects in the sky, overhead, or on the ground
- Many techniques from manned aircraft operations apply to the operation of unmanned aircraft. Examples include situational awareness, risk-based aeronautical decision making, and crew resource management.

Maintenance and Inspection

Follow all manufacturer recommendations for scheduled and unscheduled overhaul, repair, inspection, modification, replacement, and system software upgrades for the unmanned aircraft itself and all components necessary for flight.

Before beginning any sUAS flight operation, inspect the sUAS to ensure that it is in a condition for safe operation.

Loading and Performance

Prior to each flight, ensure that any object attached to or carried by the small unmanned aircraft is secure and does not adversely affect the flight characteristics or controllability of the aircraft.

Follow all manufacturer recommendations for evaluating performance to ensure safe and efficient operation. Check weather conditions prior to and during every sUAS flight and consider the effects of weather on aircraft performance.

Operating Rules

The Remote PIC must ensure that the sUAS operation complies with all operational requirements and limitations described in 14 CFR part 107. All crewmembers must comply with part 107 requirements by operating at appropriate times, in approved locations, and in a manner that protects the safety of the persons, property, and the NAS.

Certificates of Waiver

If the operation cannot be conducted within the regulatory structure of part 107, the Remote PIC is responsible for submitting an application for a Certificate of Waiver and proposing a safe alternative. Only certain provisions of part 107 are waivable. FAA will determine if the proposed operation can be safely conducted under the terms of that Certificate of Waiver.

Abnormal and Emergency Situations

Follow any manufacturer guidance for appropriate response procedures in abnormal or emergency situations. In case of an in-flight emergency, the Remote PIC is permitted to deviate from any rule of part 107 to the extent necessary to meet that emergency. FAA may request a written report explaining the deviation.

Accident Reporting

Report any sUAS accident to the FAA, within 10 days of the operation, if any of the following thresholds are met:

- Serious injury to any person or any loss of consciousness
- Damage to any property, other than the small unmanned aircraft, if the cost is greater than \$500 to repair or replace the property (whichever is lower)